

consideration of the pending claims in light of the preceding amendments and following comments.

**Prior Arguments.**

As set forth in Applicant's Preliminary Amendment, Applicant maintains that Yang is not prior art with respect to Applicant's claims and that there is no reasonable suggestion to combine the Yang and Hogan references in the manner proposed by the Examiner. Nonetheless, Applicant submits that the pending claims are allowable over the cited prior art for other additional reasons, which are presented in detail below.

**Examiner's Paragraph 2: Claim 10.**

The Examiner has rejected claim 10 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner indicated that "the third data packets sending step" lacks clear antecedent basis. Applicant has amended claim 10 to correct this issue, and Applicant submits that claim 10 is now in condition for allowance.

**Examiner's Paragraph 4: Claims 35-37.**

The Examiner has rejected claims 35-37 under 35 U.S.C. §103(a) in light of Yang as modified by Crawley.

The Examiner agrees that the primary reference, Yang, does not disclose the concept of establishing a communication link along any particular path (whether "determined" or "pre-determined") or guaranteeing any particular level of service. *See*, Examiner's Office Action, p.3, lines 10-11. However, the Examiner allegedly

relies upon Crawley for teaching the step of setting a communication link along a determined communication path, as required by claims 35-37.

Even if it were proper to combine the teachings of Crawley with Yang (which Applicant submits is an improper combination, *See below*, Applicant's comments to Examiner's Paragraph 8), the alleged combination does not disclose each of the elements of the invention as presently claimed. Applicant has amended claims 35-37 to more specifically describe the claimed invention, particularly the fact that the communication path is predetermined. Specifically, the communication path of claims 35-37 is determined prior to the initiation of a call by a calling party. The specification of the pending application describes one embodiment of this predetermined communication path as a "dedicated virtual path." *See, e.g.*, pp. 32-35. In contrast, the Crawley method involves determining a desired network communication path in response to each request to send data according to a particular QoS. *See, e.g.*, lines 2:40-45; 5:27-8:26. Thus, in Crawley, a new data communication path is calculated at the time of each new request to transmit a group of data packets. If the Crawley method were used in connection with the Yang teachings, a new communication path would be calculated for at least each new call initiated between the same nodes. As a result, different data communication paths could be used to transmit different groups of data packets between the same two nodes, provided that the different communication paths satisfy a minimum QoS. Claim 35, on the other hand, requires that the communication path between first and second telephony servers be predetermined, i.e., before the initiation of the call. Nowhere does Crawley disclose the concept of establishing a communication link between two nodes on a network based upon a predetermined communication path

between the nodes. Therefore, Applicant submits that independent claim 35 and dependent claims 36-37 are allowable over the prior art for at least this reason.

Furthermore, with respect to claim 37, neither Yang nor Crawley discloses the concept of having a routing and administration server identify a communication path between two network nodes. While Yang acknowledges the need to incorporate a “Directory Server” to “map between IP addresses and area codes of INET Phone servers”, Yang does not contemplate having the “Directory Server” identify any particular communication path between the INETPhone servers. In essence, the “Directory Server” in Yang may provide the destination address, but it does not provide the path to get there. Thus, this is yet another reason why claim 37 is allowable over the cited prior art.

**Examiner’s Paragraphs 5-7: Claims 30-34**

The Examiner has rejected independent claim 30 and dependent claim 31 under U.S.C. §103(a) in light of Yang as modified by Picard. The Examiner has further rejected dependent claims 32-33 under 35 U.S.C. §103(a) in light of Yang as modified by Picard and Crawley.

The Examiner agrees that Yang does not disclose the following steps set out in claim 30:

- (a) *generating a session identifier* identifying a call attempt between the calling party and the called party;
- (b) sending a signaling message from the first telephony server to the second telephony server via said wide area packet switched network, the signaling message comprising the called number *and the session identifier*; and
- (c) communicating a plurality of packets containing audio information between the first and second telephony servers through the wide area packet switched network, to

establish telephone communication between the calling and the called parties, wherein at least some of the packets containing audio information *also contain the session identifier*.

(emphasis added). *See*, Examiner's Office Action, p.3, lines 13-14. However, the Examiner relies upon Picard for the alleged teaching of "session ID." Applicant respectfully submits that there is no proper motivation for combining the teachings of Yang and Picard, and, even if there were, the alleged combination does not teach the limitations of claims 30-34.

First, the Examiner has stated that the motivation to combine Yang and Picard is to "identify the current session." Applicant respectfully submits that this reasoning is circular. Picard, which is directed to a unified messaging system that allows a subscriber to access stored voicemail messages, facsimile messages, combined voice and facsimile messages, and video messages over a telephone network or a data network, does not address or even contemplate a long distance telephone communication system over a packet switched network, as set forth in the pending claims of the application. As Picard is directed to a system that is different from that of the claimed invention, it is unobvious what applicability, if any, Picard's minimalist reference to a session identifier would have in the present invention. There is no discussion in either Yang or Picard to the effect that their respective teachings would have applicability outside of their specific respective environments. Therefore, the Examiner has not provided any proper motivation to combine the teachings of Picard with those of Yang. Accordingly, Applicant submits that such combination is not proper and that claims 30-34 are allowable over the cited prior art.

Even if it were proper to combine Picard with Yang, the alleged combination does not disclose the claimed invention. Picard briefly refers to a "unique identifier from the session information 175." *See*, Picard, lines 18:23-25. But Picard does not

elaborate on what specifically the “unique identifier” is or how and for what the “unique identifier” is used. What is clear, however, is that the “unique identifier” in Picard does *not* identify “a call attempt between the calling party and called party”, as required by pending claim 30, since Picard is not directed to a system having either a “calling party” or a “called party.” Furthermore, it is clear that the Picard “unique identifier” is *not* incorporated along with a “called number” to form a signaling message, which is sent from a first telephony server to a second telephony server, as is further required by claim 30. Further, there is no suggestion in either Yang or Picard that “at least some of the packets containing audio information also contain the session identifier”, as required by claim 30. In short, neither Yang nor Picard contemplate or disclose using a session identifier in connection with a long distance telephone system over a packet switched network, nor does either reference contemplate or disclose the manner in which such a “session identifier” would be used and transmitted between nodes on such a network. For these reasons, Applicant respectfully submits that pending claims 30-34 are allowable over the cited prior art.

Finally, Applicant has amended claim 32 to more clearly specify that the communication path identity received from the routing and administration server is a predetermined communication path. Therefore, for the same reasons as set forth above (in connection with Applicant’s response to Examiner’s paragraph 4), neither Crawley nor any of the other cited prior art references disclose the step of identifying a predetermined path through the wide area packet switched network. Thus, for this additional reason, Applicant submits that claims 32-34 are allowable over the cited prior art.

**Examiner's Paragraph 8: Claims 1-7, 9-10, 12-13 and 15-19.**

The Examiner has rejected claims 1-7, 9-10, 12-13 and 15-19 under 35 U.S.C. §103(a) in light of Yang as modified by Hogan and Crawley.

Among others, claim 1 requires the following steps:

allocating a resource on the wide area packet switched network *sufficient to provide a guaranteed level of service* through the wide area packet switched network; and

selectively establishing a communication link, *via the resource at at least the guaranteed level of service*, between the first telephony server and the second telephony service through the wide area packet switched network, to establish communication between the calling and called parties.

(emphasis added). The Examiner concedes that neither Yang nor Hogan discloses the concepts of allocating a resource on the wide area packet switched network *sufficient to provide a guaranteed level of service* and establishing a communication link via the resource to provide the *guaranteed level of service*. See, Examiner's Office Action, p.7, lines 15-16. However, the Examiner allegedly relies upon Crawley for these concepts. Applicant submits that there is no proper motivation found within the cited references to combine them in the manner suggested by the Examiner. Specifically, Yang does not contemplate or disclose that there would be any need in a long distance Internet system to employ a Quality of Service system as in Crawley or otherwise ensure a guaranteed level of service. Yang does not even suggest that the normal Internet packet routing method would be insufficient for Internet long distance telephone systems. Similarly, Crawley does not indicate that its Quality of Service system would be applicable or useful in connection with a long distance telephone system for the Internet. Rather, Crawley identifies video conferencing, which requires the simultaneous transfer of both video and audio data, as an example of where its system would be useful. Therefore, the Examiner has not identified a proper

motivation to combine the cited references. Thus, claims 1-7, 9-10, 12-13, and 15-19 are allowable over the cited prior art for at least this reason.

Further, claims 2-4 require the step of “receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server *and a predetermined communication path* corresponding to the second telephony server.” (emphasis added). Similarly, claims 7, 9-10, 12, 17 and 19 all require a *predetermined* communication path. As explained above (in connection with Applicant’s response to Examiner’s paragraph 4), even if it were proper to combine the teachings of Crawley with those of Yang and Hogan, the combination does not teach the concept of a predetermined communication path. At best, Crawley teaches the concept of determining a new communication path, which may or may not be the same path, in response to each request to send data packets according to a requested Quality of Service. Therefore, for this additional reason, Applicant submits that claims 2-4, 7, 9-10, 12, 17 and 19 are all allowable over the cited prior art.

Additionally, with respect to claims 2-4, neither Yang nor Crawley discloses the concept of having a routing and administration server provide the identity of a communication path (whether predetermined or not) between two nodes on a network. While the “Directory Server” in Yang provides the identity of the destination INETPhone, as recognized by the Examiner (*See*, Examiner’s Office Action, p.8, lines 4-6), Yang’s “Directory Server” does *not* provide the specific communication path between the two INETPhones. As is known in the art, there are many different conceivable communication paths between two nodes on the network. Thus, the step of claims 2-4 directed to the routing and administration server providing a communication path between the first and second servers is not disclosed

by the cited prior art references. As a result, this is additional reason why claims 2-4 are allowable over the cited prior art.

With respect to claim 5, neither Yang nor Crawley discloses the concept of obtaining a “prescribed service level” from a routing and administration server. The Examiner has indicated that Yang discloses incorporating a local directory on the INETPhone server from which it can obtain the IP address of a remote INETPhone server. *See*, Examiner’s Office Action, p.8, lines 11-13. However, the Examiner has not identified where it is disclosed that the database maintained by the local server incorporates information relating to a “prescribed service level”, as required by claim 5. Applicant submits that neither Yang nor Crawley disclose this element. This is another reason why claim 5 is allowable over the cited prior art.

With respect to claims 9-10, and 15-16, the Examiner states that “the condition of the called party is monitored by the remote central office and busy status should be relayed to the remote server which in turn sends back condition of called party.” *See*, Examiner’s Office Action, p.8, lines 14-16. However, the Examiner has not identified where these steps are disclosed in any of the cited references, nor has Applicant been able to identify such alleged disclosure in Yang or any other the other cited references. Applicant submits that none of the cited references disclose the steps relating to sending information between the telephony servers based on the condition of the called party. Therefore, Applicant respectfully submits that claims 9-10 and 15-16 are allowable for this additional reason.

Regarding claim 12, neither Yang nor Crawley discloses the required steps of sensing a condition of a calling party, suspending the transmission of data packets between the telephony servers, and transmitting a signaling data packet to the called party concerning the condition of the calling party. The Examiner indicates that the



“CO always monitors the condition of calling party for connection. It is also clear that if the call is dropped by the caller, transmission has to be suspended by the central office.” *See*, Examiner’s Office Action, p.8, lines 17-18. However, the Examiner has not identified anywhere in the cited prior art references where these steps are set forth, and Applicant is unable to find any such disclosures. Further, the Examiner has not even addressed the element of claim 12 requiring the transmission of a signaling data packet to the called party concerning the condition of the calling party. For these additional reasons, claim 12 is allowable over the cited prior art references.

With respect to claims 13-16, the Examiner has not identified any prior art reference that discloses the steps of sending *communication samples* from the called party to the calling party via the network, nor has the Examiner identified any prior art reference that discloses the step of “forwarding the received communication samples to the first central office on *an assigned trunk line based on the identifier.*” (emphasis added). Further, with respect to claim 16, the Examiner has not identified any prior art reference disclosing the step of “disconnecting the calling party from the communication link” based on the signaling message, as required by claim 16. Therefore, Applicant submits that these are yet additional reasons why claims 13-16 are allowable over the cited prior art.

Finally, with respect to claim 17, the Examiner does not point to any prior art reference that suggests “changing a data rate of the communication link based on traffic on the predetermined communication path” in an Internet-based telephony system, as required by the claim. Thus, this is yet an additional reason why claim 17 is allowable over the cited prior art.

**Examiner's Paragraph 9: Claims 8, 14, 20-22 and 28-29.**

The Examiner has rejected claims 8, 14, 20-22 and 28-29 under 35 U.S.C. §103(a) in light of Yang in view of Hogan, Crawley and Picard.

For the same reasons set forth above, Applicant submits that the combination of prior art suggested by the Examiner is without proper motivation. Accordingly, for this reason alone, Applicant submits that claims 8, 14, 20-22 and 28-29 are allowable over the cited prior art.

Further, as stated above, claim 8 is allowable because none of the cited prior art references (including Picard) disclose the concept of “generating a session identifier identifying a call attempt between the calling party and the called party.” It is impossible for Picard to disclose this step because Picard is not even directed to a long distance telephone system. Thus, any disclosure by Picard of a “session identifier” could not identify “a call attempt between the calling party and the called party”, as required by claim 8. Also, as stated above, claim 8 (which depends from claim 7) is allowable because it requires that a router send “the first data packet via a *predetermined* communication path...” (emphasis added), which is not disclosed by any of the cited prior art references.

With respect to independent claim 20, none of the prior art references disclose the steps of “*determining...a condition of the destination number* from a first central office...” and “sending a second data packet carrying said session identifier *and said condition* ...” In short, the Examiner has not identified any prior art reference that discloses the concept of determining a condition of a called number and communicating such condition to the calling number in an internet based telephone system. This is an additional reason why independent claim 20 and dependent claims 21-22, 28-29 are allowable over the cited prior art.

Finally, claims 21-22 both require a *predetermined communication path*, which, as illustrated above, is not found in any of the cited prior art references. Thus, claims 21-22 are allowable for this additional reason.

### **CONCLUSION**

Therefore, Applicant submits that all pending claims are distinguished over the cited prior art and are in condition for allowance. If the Examiner has any questions or issues relating to Applicant's response, he is encouraged to telephone the undersigned representative.

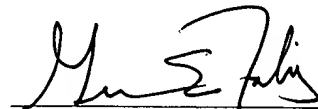
It is respectfully requested that the United States Patent and Trademark Office correct the Attorney Docket Number with regard to this application to reflect the correct Attorney Docket Number of 65632-0107, **not 50107-459**.

It is believed that any additional fees due with respect to this paper have already been identified in any transmittal accompanying this paper. However, if any additional fees are required in connection with the filing of this paper that are not identified in any accompanying transmittal, permission is given to charge deposit account number 18-0013 in the name of Rader, Fishman & Grauer PLLC.

Respectfully submitted,

Date: January 3, 2001

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**MARKED UP VERSION OF ALL AMENDED CLAIMS**

10. (Twice Amended) The method of claim 9, wherein the ~~third~~ first traffic data packets sending step comprises outputting the ~~third~~ first traffic data packets at least at a minimum data rate according to the guaranteed level of service.

32. (Amended) The method as in claim 30, wherein the identifying step comprises:

sending a routing request message via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database, the routing request message including said at least part of the called number; and

receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and the identity of a predetermined communication path through the wide area packet switched network to the second telephony server capable of providing a guaranteed level of service.

35. (Amended) A method of telecommunication over a wide area packet switched network, the method comprising:

sending from a calling party a called number, corresponding to a called party, to a first central office connected to a first telephone system;

forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network;

identifying a second telephony server, in communication with the wide area

packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least part of the called number;

    sending the called number from the first telephony server to the second telephony server via said wide area packet switched network;

    establishing a communication link between the first telephony server and the second telephony server, wherein the establishing step comprises setting the communication link along a predetermined communication path within said wide area packet switched network; and

    communicating telephone information between the calling and called parties via the servers and the predetermined communication path.

36. (Amended) The method as in claim 35, wherein the setting of the communication link along the predetermined communication path comprises allocating a resource along the path for the communication link, such that the communication link will provide at least a guaranteed minimum level of service throughout the communication of the telephone information.

37. (Amended) The method as in claim 35, wherein the identifying step comprises:

    sending a routing request via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database; and

    receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and an identification corresponding to the predetermined communication path

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to the second telephony server.